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Anachronism in Geoffrey Hill's "Mercian Hymns"

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Abstract

As Jeffrey Wainwright (2005) notes, "it is apparent that [Geoffrey] Hill's poetry has always known history very well indeed" (n.p.). Throughout his works, including the *Mercian Hymns*, historical events and figures play a central role. When references to the past make their way into literature, the resulting allusions often broaden the work's depth, increasing not just the richness of the symbolic interpretation but also rooting the work into a multidisciplinary conversation, bringing events from different points along the human timeline into the conversation. When anachronism occurs, the intentionality plays a role in determining the significance not just of the instance but, potentially, the work as a whole. This paper explores how Hill puts anachronism to intentional use in the Mercian Hymns, with an enduring impact on the meanings that emerge for the reader, depending on the reader's cultural perspective.

Keywords: anachronism, Geoffrey Hill, history, international, memory, multidisciplinary

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Ismael

Introduction

Sir Geoffrey William Hill (1932-2016) noted English poet and professor emeritus of English literature and religion at Boston and Oxford universities. His contribution exceeds poetry to critical writings. He wrote *Mercian Hymns*, a collection of some thirty poems that place Hill's childhood, growing up in Mercia in England's West Midlands, with King Offa's history, who ruled Mercia, then an Anglo-Saxon principality, in the eighth century (Milne 1979). This juxtaposition means that anachronism plays a significant role in the exposition of themes in the series, which deals with such ideas as collective memory, national identity, and the definition of such concepts as personal value or worth as well as authority. Questions such as what it means to be English resonate from the intersections from different points in history. The series was published in 1971 and remained one of the unique works in Hill's body of poetry.

From the outset, it appears that the poem will take, shall one say, a unique approach, one that plants tongue, at least at times, firmly in cheek. The poem begins: "king of the perennial hollygroves, the riven sandstone: overlord of the M5; architect of the historic rampart and ditch, the citadel at Tamworth, the summer hermitage in Holy Cross; guardian of the Welsh Bridge and the Iron Bridge: contractor to the desirable new estates: salt- master: money-changer: commissioner for oaths: martyrologist: the friend of Charlemagne. 'I liked that,' said Offa, 'sing it again' "(Hill 1971, n.p.).

If one looks, at the interplay of terminology between items that would have been present in the eighth century (such as the holly-groves) and those that were patently not present (such as the M5, a motorway), then one sees Hill's technique at work. From the outset, he sets up a junction between past and present that serves as a central dialogue in the poems. Offa's interjection shows that he stands somewhat outside time itself, instead of working as a sort of extra narrative presence who will serve to emphasize many of Hill's ideas.

Offa, Anglo-Saxon King

The central anachronism in *Mercian Hymns* is the introduction of King Offa into contemporary Britain. The fact that the speaker introduces Offa to the reader as the one who built the venerable dyke that separates Wales from England renders Offa as a symbol for the isolationism within England as well as its desire to gain empire. In Hymn VII, one sees some of the negative traits that Offa brings. In this part, he deals with another Anglo-Saxon monarch, Ceolred, who is dragged into the present day.

The speaker notes that "Ceolred was [Offa's] friend and remained so, even after the day of the lost fighter" (Hill 1994, p. 99). This referred to a toy biplane that had fallen through a crevice in the classroom floor, down into the space among the piers. Offa's revenge is to entice Ceolred, "who was sniggering with fright, down to the old quarries, and [to flay] him" (Hill 1994, p. 99). Offa would flay someone for losing a toy suggests that he is not only ruthless but to a degree that is not proportional to the cause for outrage. If one views Offa as a symbol for the origins and the

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intentions of the modern British nation, the one that spread empire worldwide, then one can see his behavior here as a figurative expression of its ruthless behavior toward parts of the world that he seeks to conquer.

If one examines what this trend would mean for Great Britain to have Anglo-Saxon origins, this would suggest that those origins also contain a great deal of cruelty — and that they had a significant impact on English culture — in the future, even though there is a tradition in literature that points toward the gentler elements of English origins as more influential, perhaps to take the patina of brutishness away from the idea of what it means to be English (Moffett 2006,p.14).

In the section of "Acknowledgments" that appeared with the original publication of *Mercian Hymns*, Hill addresses the fact that Offa is everywhere – but also everywhen, both in the seventh century and in the present day as the poem presents it. Hill notes that Offa was already taking on legendary status in medieval England. When Hill refers to him as the "presiding genius of the West Midlands," (Moffett 2006, p.14), he also points out that anachronisms will result in the presentation of Offa in work. Still, it also brings to question Hill's notions of what it means to be English and connecting them to Offa. If *Mercian Hymns* poses the question as to whether Offa's influence remains an integral part of England not just at the writing of the hymns but even into the future after that, one gets the sense that this king is a lot less noble than that lord of Camelot whom so many English like to consider their idyllic ruler.

If one returns to the beginning of the poem, mentioned in the introduction, Offa responds to a lavish description of himself, which might well be taken from a proclamation penned with a quill on sheepskin, with a terse chuckle. Here is the series of epithets again: "king of the perennial holly-groves, the riven sandstone: overlord of the M5; architect of the historic rampart and ditch, the citadel at Tamworth, the summer hermitage in Holy Cross; guardian of the Welsh Bridge and the Iron Bridge: contractor to the desirable new estates: salt-master: money-changer: commissioner for oaths: martyrologist: the friend of Charlemagne. 'I liked that,' said Offa, 'sing it again' "(Hill 1971, n.p.). If one looks at the interplay of the nicknames given to Offa, some suggest a sort of oppressive domination (overlord and money-changer). Still, others offer a kind of stewardship (architect, guardian, contractor, commissioner). Ending with "the friend of Charlemagne," who is selected as the first Holy Roman Emperor, gives Offa a status that the sarcastic flair of "overlord of the M5" seems to want to undermine.

When Offa asks for the opening to be sung again, this could suggest satisfaction. Still, it could also mean either confusion or merely a lack of emotional response, given the different tones within the same series of compliments. One could easily see the king wondering whether the positive sentiments coming his way are sincere or sarcastic, given the level of exaggeration that appears.

Hill's imagination for history goes back to memories of childhood . Also, it considers the implications for what a relatively unknown Anglo-Saxon king could bring to the modern sense of

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the English identity. The time shifts among four primary periods: the present of reflection, the past of memories of boyhood, the history of Offa's time on the actual throne, and a sort of Anglo-Saxon Tardis that carries Offa back and forth between the eighth century and the twentieth. The poem suggests a first- person narrator that appears to be rooted in Offa's memories of his boyhood, but that fluctuates from time to time, leaving the actual voice ambiguous.

The effect of ambiguity, as one might expect, is not always consistent. Empson notes that ambiguity in writing requires multiple types of indecision: "an indecision as to what you mean, an intention to mean several things, a probability that one or other or both of two things are meant, and the fact that a statement has several meanings" (Empson 1951, pp.5-6). In understanding the presentation of Offa, it is essential to note that the work lacks certainty not just in the state of mind of the speaker, but also the consistency in the message from the other voices in the poem. In cases like this, the reader needs to find a point of distinction between situations in which the author might lack certainty or situations in which a remark could have multiple meanings, all of which were within the author's mind at the time of writing. Also, it is essential to discern whether it makes sense that the text might have a more fabulous body of meaning than the author meant for it.

Here is a relevant passage from Hymn IV:"I was invested in mother-earth, the crypt of roots and endings. Child's play. I abode there, bided my time: where the mole shouldered the clogged wheel, his gold solidus; where dry-dust badgers thronged the Roman flues, the long-unlooked-for mansion of our tribe (Hill 1994, p.96). At this point, the "I" could be the implied boyhood voice of Offa, remembering boyhood as a time when he dwelt in the earth, and through the lens of memory, sees that waiting as biding his time. The "I" here also could refer to Offa talking about himself in that sort of Doctor Whovian floating between the eighth century and the twentieth century. Merely reading the poem provides no guide as to which of those choices is the correct one. Instead, one could argue that this is a point where the work intentionally moves into ambiguity, which puts two voices in the reader's ear at the same time, leaving the reader unaware of the intentional extent of the combination.

It is worth pointing out that, according to the work of the poststructuralists, led by such figures as Roland Barthes, the actual intent of the author is immaterial. Barthes (n.d.), in "The Death of the Author," uses the word "scripture" to refer both to the individual writing a text and the individual reading the text, as both have a semiotic nexus operating between their intellectual filters and the end product. In the case of the person writing the text, that nexus between inspiration and composition changes the meaning; in the person reading the text, the set of experiences that the reader has gone through in life uniquely colors his or her interpretation, shifting the meaning once again. If one looks at this discussion of ambiguity from a poststructuralist perspective, one sees that the intent of the author is less important than the interpretive result for the person encountering the text, as the person reading the text often brings just as much chance to the reader as the person who recorded it.

A passage from Hymn V also highlights the fundamental ambiguity at work in *Mercian Hymns*: "exile or pilgrim set me once more upon that ground: my rich and lonely childhood. Dreamy, smug-faced, sick on outings – I who is taken to be a king of some kind, a prodigy, a maimed one" (Hill 1994, p. 97). If one believes that the "I" here is that eponymous voice from Offa's childhood, then the words "exile" and "pilgrim" ring somewhat false – or at least somewhat arrogant, at least through recollection. Perhaps, for example, the adult Offa could be looking back at his boyhood and reflecting that his personality was snobbish or self-satisfied. If this is the voice of Offa moving fluidly through time, this could be a comment from the author that the king/narrator is a hypocrite, too willing to indulge his sense of self to portray his actual significance truthfully.

In 1981, Hill sat down with John Haffenden for an interview about this poem.

The conversation reveals, to a limited degree, the correct direction to follow when answering questions about this ambiguity. Hill notes that he had the desire to express "mixed feelings for [his] own home country" as well as the opacity of English history" (Haffenden 1981, p.94). This provides three different answers: it confirms the fact that there is ambivalence at work in the poem (although the reader hardly needs anyone to vouch for that); it suggests that Offa holds a significance in the poem that is intentionally dual – and intentionally left without resolution, a puzzle for the reader; finally, it shows how ambiguity, somewhat ironically, can end up clarifying meaning. However, the interview does not clear up what appears to be a bias for Offa throughout the poem, one that seems to relish the violent side of his personality rather than to provide a sort of moral judgment on his behavior for the reader.

One could view this lack of judgment in a couple of ways: a sort of entertainment that does not come with any sense of restraint, or as a sort of ironic ambivalence of its own, designed to make the reader wonder whether or not the author takes the moral tone that the speaker seems to at times, linking Offa's brutish behavior with the brutal behavior of the British Empire, or not.

In his interview with Haffenden, Hill indicates that his purpose was to bring both the voice of a "tyrannical creator of order and beauty" and the voice of a boy facing "early humiliations and fears," for the purpose to show the "discovery of a tyrannical streak in oneself" as well as its development as that person moved toward and into adulthood (Haffenden 1991, p.94). The claim that going through a series of emotionally negative experiences in one's childhood necessarily leads to tyrannical behavior as an adult is a problematic one, given the sheer universality of those childhood experiences, and it is this implication that makes the anachronistic extension of Offa somewhat complicated.

With that said, Offa and Hill both have their origins in the same section of England, and both seem to feel a sense of identity with their country is a part of the cycle of poems that is worth addressing. One aspect of the anachronism, of course, has to do with the fact that the idea of England as a nation was much different, and much smaller, in the eighth century than it is in the

twentieth. Just as ambiguous as the relationship between the two ideas of nationalism is, so is the connection between Offa and the boy.

The fantasy of living like a king over a world in which one finds life to be unfair and degrading is a common one in childhood, whether one finds it in such work as Maurice Sendak's Where the Wild Things Are or in the escapism that comes from the establishment of a world in which some children get to head off to a particular school where they learn to do magic just at the dawn of puberty, when their sense of identity is just awakening. The notion that the boy in the poem fantasizes about the possibility of his status as a king is reasonably clear from the verse. However, this is a sort of incongruous comparison because the connection between those frustrations and the tyrant's role, as mentioned earlier, is somewhat problematic. Much as the journey of the young Max, sent to his room without dinner only to fantasize about a trip to an island filled with monsters who end up doing his bidding and crowning him king, there is much more of the grotesque in a world shaped by such whim than there is in terms of genuine self-reflection.

The grotesque can serve as the basis for complexity in a poem, and the questions that the connection between Offa and the boy generates can be a source of that complexity. Hill, in an interview with *The Paris Review*, claimed that when poems contain "any complexity of language, any ambiguity, any ambivalence," they also include "intelligence" (Hill 2000, p.275). In his work, *The Structure of Complex Words*, Empson (1951) notes that when a text is ambiguous, this can lead to interest for the reader, no matter what the intention of the author concerns the actual meaning. In other words, if there is ambiguity between the two interpretations, the ambiguity is of interest to the critic and reader whether the author meant one of the two, both of them – or neither. In Hymn V, one reads that the speaker "wormed [his] way heavenward for ages amid barbaric ivy, scrollwork of fern" (Hill 1994, p. 97). Here the ambiguity centers around the word *heaven*: Is this a reference to the physical sky above, or is it a more metaphysical reference to the next plane.

If one looks at the term "for ages" from that quotation in a literal way, then it seems that one is dealing with the speaker's view as a timeless Offa, moving back and forth between centuries. However, if one looks at the term "for ages" as the sort of hyperbole to which a boy might resort in the description of a situation, then the speaker here could be the young boy, considering what had happened in the ruins he was exploring. The ambiguity enabled by this anachronism is what makes this point in the poem of interest.

It is possible, of course, that the option for confluence between the boy and Offa makes the question moot since both of those factors could be in operation behind the voice. Anther point of ambiguity that results from this anachronism comes in Hymn X, in which the speaker "wept, attempting to master *ancilla* and *servus*" (Hill 1994, p.102). Bursting into tears over grammar questions is a reaction that one might anticipate from a boy – but it is also possible that the speaker here is Offa (North 1987). However, the crying would seem more appropriate for the boy while

more figuratively fit for the king. If one considers that the speaker here is Offa, there could also be symbolic interpretations for the possibility that the king has to bring others beneath him in servitude.

There are also several points at which the *Mercian Hymns* show a fascination with the pursuit of power. This is a point at which the ambiguity concerning the identity of the narrative voice becomes even more of an interpretive problem, and the silences within the poem become increasingly pregnant. In Hymn VII, one returns to the memory of flaying Ceolred and then leaving him behind in a sand lorry, traveling quietly and in silence. The most intriguing part of this passage is that the speaker travels "for hours, calm and alone" in the aftermath of such a violent action (Hill 1994, p. 99).

The implication here is that calm seems like a counterintuitive response to such actions of violence. One generally moves into a period of peace after an experience that brings happiness or satisfaction. In carrying out violence, the aftermath often brings anxiety, worry, and even a sense of frustration at times – unless one has enjoyed what one has done. The importance of calm could suggest a feeling of accomplishment and even pleasure taken in what has happened in the last few minutes or hours. One gets the understanding that the speaker has acted brutally (as suggested by the use of the word "flayed"), and with malice aforethought (as indicated by the use of the story "lured"). The fact that he moves to travel alone for such an extended period suggests both that he realizes that his actions violate social norms – but is willing to spend his time of satisfaction alone, discovering learning on an individual basis.

What then is the effect of a speaker that appears to find pleasure in delivering pain and fear to others and then enters into a period of calm after having exercised that sort of brutish power over others? No ethical questioning emerges explicitly from the text; instead, there is simply a shortage of ethical consideration at any point. Therefore, if there is a judgment on the morality of the situation, it takes place silently. This, of course, creates another point of ambiguity in the poem. When it comes to leaving important matters unsaid, Hill referred to this in an interview in *The Guardian* in 2002. He noted that when he was young, "the word 'cancer' wasn't said aloud; it was mouthed silently. In [his] own approach to language, that aspect of fraught mime is as significant...as are the history and contexts of etymology" (Hill 2002, n.p.). The term "fraught mime" here is interesting to consider. It is that anxiety that waits not just the whispering or silencing of problematic words but also the hearing of that adjustment in volume and delivery; the adjustment often carries more rhetorical weight than the text itself.

It is clear, of course, that Offa enjoys carrying out behavior that is primal in its violence. The creation of pain, suffering, fear, and even death in others pleases him and resolves what, for him, is an apparent necessity. There are times when establishing and maintaining one's own rule as king makes this a need; there are other times when enjoying the experience of power results in this as a consequence. The fact that one reads about the satisfaction that the speaker feels from the

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situation without any ethical correction raises the question of whether, at the authorial level, there is still a way to use reason and justice when carrying out force as a king.

In other words, if one has power, as Offa has power, what is the proper connection between the use of force and the enforcement of the law? Does the existence of a code of law make the use of violence that, in the hands of others, would violate that code, legitimate for those carrying out the will of the government? There is a scant response to that question in the hymns; there is, though, a great deal of enjoyment that Offa derives from delivering fear. In this passage from Hymn XVIII, one sees this pleasure at a new level: "He willed the instruments of violence to break upon meditation. Iron buckles gagged; flesh leaked rennet over them; the men stooped; disentangled the body. He wiped his lips and hands. He strolled back to the car, with discreet souvenirs for consolation and philosophy" (Hill 1994, p. 110). There is little left to the moral imagination here concerning the possibility that there is some way justice is carried out by this application of pain. Instead, torture has taken place for its own sake, for the sake of the one who has sufficient power over others to carry it out with impunity.

The "discreet souvenirs" that Offa carries with him back to his car can be seen as an extension to the stroll that the speaker earlier made to his sand lorry after having carried out that brutal flaying. He realizes that if others knew about the souvenirs, the parts of the body that he has chosen to carry along as souvenirs, then there might be some censure to come, much like the disfavor into which American soldiers fell after it became known that they had taken photographs of prisoners that they had taken in Iraq forced into humiliating positions. The fact of the torture was not, perhaps, the most shocking detail; it was the fact that the soldiers felt not just amusement at what they had done but the entitlement to take and keep photographs of their deeds.

Suppose one takes from this poem the suggestion that the Anglo-Saxon area ruled by Offa as inspiration for Offa to speculate about a future England as a nation, then one could also take the idea that notions of power and its exercise as a result. It is a short path from that point considering how the English government exercises force in the twentieth century – and exercised force in its days of empire – descended from Offa's thoughts and had those vicarious pleasures in common.

Anachronism in Form: The Composition of Mercian Hymns

It is also worth noting at this point that the style that Hill brings to bear in *Mercian Hymns* differs substantially from that of many of his earlier works. Many of those poems featured a great deal of formality, not just in tone but also structure, showing a fixed pattern of meter, generally iambic (Wootten 1998). In the *Mercian Hymns*, though, that pattern has gone by the wayside. Instead, one finds "a rhythmical prose influenced by Anglo-Saxon and early Welsh verse"(Wootten 1998, p.156). The thematic result is also different; while many of Hill's earlier works demonstrate a great deal of pathos, what one sees in this cycle of poems is the absence of pathos, the presentation of the event and word without the concomitant demonstration of feeling that one might expect.

The syntax at work in the *Mercian Hymns* brings nouns and adjectives together without a verb to provide a set of actions. In Hymn VI, the speaker "fostered a strangeness; gave [himself] to unattainable toys. Candles of gnarled resin, apple branches, the tacky mistletoe. 'look' they said and again 'look.' But [he] ran slowly; the landscaped flowed away, back to its source" (Hill 1994, p. 110). The juxtaposition here of the candles, apple branches, and mistletoe suggest a sort of enchantment, which then runs smack into the word "tacky," which takes the patina of the mystical away, as mistletoe can have a sticky texture to it – and can also be tacky in the sense of a clichéd or even vulgar decoration.

One implication of this is a loss of innocence and wonder in the mistletoe, an item that often causes excitement about the coming of Christmas in children. Still, as life moves into adulthood, those feelings are replaced by memories of an unwanted kiss at a party, fueled by too much liquid "joy" in the kisser.

The idea of a quality remaining "unattainable" in this situation has much less to do with its physical unavailability and much more to do with the loss of the enchanted associations that had previously attended it. One can compare this to the shift in the relationship between Jay Gatsby and Daisy once they reunite and start spending afternoons in assignation together. After their meeting, that green light on her dock, which had stood for possibility, now was no longer necessary. "Compared to the great distance that had separated him from Daisy [the light] had seemed very near to her, almost touching her. It had seemed as close as a star to the moon. Now it was again a green light on a dock. His count of enchanted objects had diminished by one" (Fitzgerald, 1923, n.p.). The implication was that finally gaining the object of his desire had removed the patina of magic and awe from that object.

Conclusion

In the *Mercian Hymns*, the loss of the patina is somewhat different. While the mistletoe itself might not have been the object of desire, the associations that it brings, the experience of the Christmas season, may have been the object. Once one has experienced that object multiple times, the mystique wears off, and now it seems, out in the full light of adult experience, somewhat sad. This could explain the eponymous shifting in the narrative voice as well, because it is no longer possible for Hill to look at life through the innocent eyes of that young boy, and it is no longer possible to live that life of isolation, keeping his associations to himself. How history and mythology intervene in our connection with the path are moving from childhood to contact to broader adult society. Sometimes this leads to a syncretism that is less than pleasing, because it turns our childhood illusions into an awareness of the horror of humanity – and the beauty that some find in that horror.

This paper analyzes the use of anachronism in the *Mercian Hymns*. The movement back and forth in time leads to several ambiguities as far as the speaker's voice and the expression of

the theme. This work also represents an unusual choice of form for Hill, also an anachronism, as it seems from a different time than his typical style.

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References

- Barthes, R. (n.d.). *The Death of the Author*. The University of Pennsylvania. Retrieved 2 February 2020 from https://writing.upenn.edu/~taransky/Barthes.pdf
- Empson, William, (1951). The structure of Complex Words. Oxford: Penguin.
- Fitzgerald, F.S. (1923). *The Great Gatsby*. Retrieved 4 February 2020 from: http://gutenberg.net.au/ebooks02/0200041.txt
- Haffenden, J. (1981). Geoffrey Hill. *Viewpoints: Poets in conversation*. London: Faber and Faber.
- Hill, G. (1971). from *Mercian Hymns*. Poetry Foundation. Retrieved 30 January 2020 from https://www.poetryfoundation.org/poems/48461/mercian-hymns
- Hill, G. (1994). New and collected poems 1952-1992. Boston: Houghton Mifflin.
- Hill, G. (2000). The art of poetry LXXX. Interview with Carl Phillips. *The Paris Review 154* (Spring 2000): 272-299.
- Hill, G. (2002). A matter of timing: Mercian poet Geoffrey Hill on how he creates 'beautiful energy.' *The Guardian* 21 September 2002. Retrieved 4 February 2020 from: http://www.guardian.co.uk/books/2002/sep/21/featuresreviews.guardianreview28>
- Milne, W. S. (1979). Geoffrey Hill's Mercian Hymns. *ARIEL: A Review of International English Literature*, 10(1).
- Moffett, J. (2006). Anglo-Saxon and Welsh Origins in David Jones's The Anathemata. *North American Journal of Welsh Studies*, 6(1), 1-6.
- North, M. (1987). The word as a bond: Money and performative language in Hill's *Mercian Hymns*. *ELH* 54(2): 463-481.
- Wainwright, J. (2005). *Acceptable words: Essays on the poetry of Geoffrey Hill*. New York: Manchester University Press.
- Wootten, W.G. (1998). The aesthetics of history in the modern English long poem: David Jones' the anathemata, Basil Bunting's Brigg Flatts, Geoffrey Hill's Mercian Hymns, and Roy Fisher's a furnace. Durham theses, Durham University. Retrieved 4 February 2020 at http://etheses.dur.ac.uk/4782/1/4782_2251.PDF